



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTES AND LITERATURE

ASTRONOMY AND PHYSICS

A Laboratory Astronomy.¹—This book is the outcome of the author's experience in handling with his large elementary classes in Harvard College, "those difficult and discouraging" parts of astronomy which deal with "the diurnal motion of the heavens and the apparent motions of the sun, moon, and planets among the stars." It is suggested that each student ought to make for himself, and discuss carefully, a great number of simple observations, so that the facts to be brought out may become a part of his own experience. The apparatus required, most of which has been especially designed for this work, is so inexpensive that each student can be supplied with a complete outfit. This makes it possible for all the members of a class to do similar work at a given time — "a principle of cardinal importance in elementary laboratory work with large classes." The book is intended primarily for teachers and should be used in connection with a descriptive text-book.

No one who knows Professor Willson personally, will need the reviewer's assurance of the remarkable ingenuity of his methods, or of the admirable qualities of his style. This book is a fine example of a modern tendency, new in astronomy, but fortunately well established in physics and chemistry, of carrying interesting laboratory work into the very beginning of a student's acquaintance with natural science.

A feature of interest to the general reader is a well written chapter on the contents and use of a nautical almanac, with a full set of specimen pages.

H. N. D.

A Laboratory Physics.²—This book, like the one just reviewed, is intended as a laboratory manual for a large elementary course in Harvard College, and presents such material as might form a set of

¹ Willson, Robert W. *A Laboratory Astronomy*. Boston, Ginn and Co., 1906. 8vo, ix + 189 pp.

² Sabine, Wallace C. *A Student's Manual of a Laboratory Course in Physical Measurements*. Rev. ed., Boston, Ginn and Co., 1906. 8vo, vi + 97 pp.

"daily lectures preceding the laboratory work and describing the experiments to be performed." It is, nevertheless, remarkable for its freedom from the pedantic, cut-and-dried, schedule method of presentation which so frequently characterizes elementary laboratory manuals, for many of Professor Sabine's pages are interesting reading as such, and throughout, "too specific instruction" has been avoided as tending "not only to deprive the student of initiative but also to make any departure in the apparatus confusing."

As a matter of fact the spirit of the book would have been better expressed by reversing the order of these two clauses, for "in the majority of cases the description is purposely not such as will admit of a mechanical and unintelligent interpretation." In particular, the three-page introduction is an unusually fine presentation of the point of view from which a student should attack the work which is to follow.

The experiments described are representative of nearly the whole range of elementary physics. They should properly be preceded by the still more elementary work of a modern high-school course, as much of the apparatus requires comparatively skilful and appreciative handling. Two short appendices on "significant figures" and "graphical representation" are especially worthy of mention.

H. N. D.

BIOLOGY

Clements's Research Methods in Ecology¹ is the outcome of some eight years of practical work by the author in the experimental study of the factors that determine the distribution and adaptive modifications of plants. Students of this comparatively new branch of science are to be congratulated on the possession in this volume, of a concise statement of the aims, methods, and problems of ecology. The author points out that the greater part of so called ecological study has hitherto been very superficial and of comparatively little value, largely because of a failure to recognize and measure accurately the several factors that determine for each species its particular environment.

¹ Clements, F. E. *Research Methods in Ecology*. Lincoln, Neb., University Publishing Co., 1905. 8vo, xvii + 334 pp., 85 figs.